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H01L 29/792

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(71)Applicant : TOSHIBA CORP

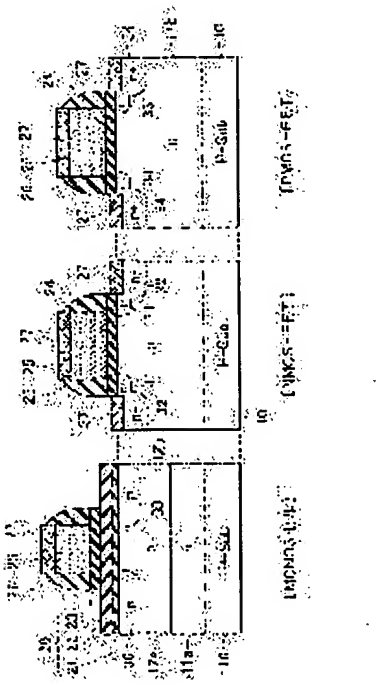
(72)Inventor : AIDA AKIRA
NOGUCHI MITSUHIRO
TANAKA MASAYUKI
SAIDA SHIGEHIKO

(54) SEMICONDUCTOR DEVICE AND ITS MANUFACTURING METHOD

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a semiconductor device of high performance wherein a MONOS type memory cell is formed on a semiconductor substrate and a method for manufacturing the device.

SOLUTION: This semiconductor device is provided with the semiconductor substrate, the memory cell which is formed on the semiconductor substrate and has a first gate insulating film of a laminate structure which contains a silicon nitride film turning to a charge storage layer, and a transistor which is formed on the semiconductor substrate and has a second gate insulating film. A source/drain diffusion layer of the memory cell is coated with a part of the first gate insulating film, and a metal silicide film is formed on a surface of a source/drain diffusion layer of the transistor.



LEGAL STATUS

[Date of request for examination] 15.07.2003

[Date of sending the examiner's decision of rejection] 19.04.2005

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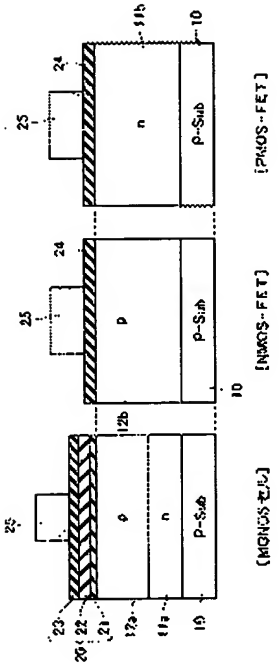
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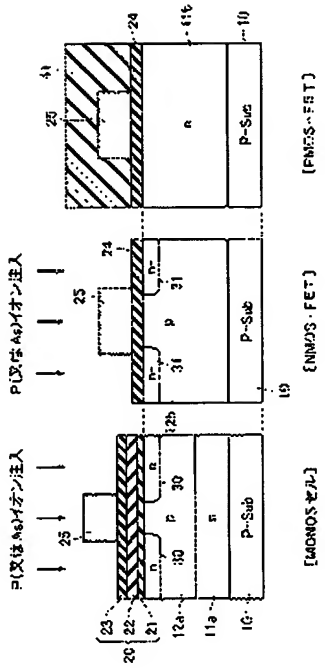
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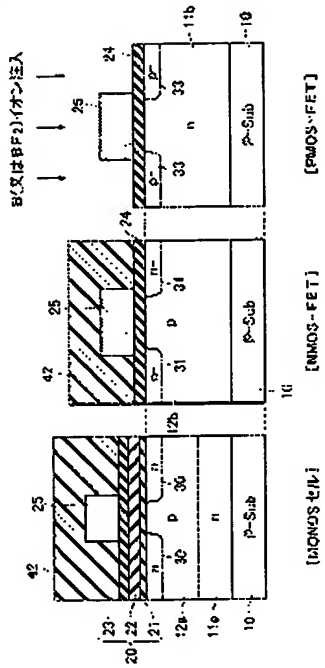
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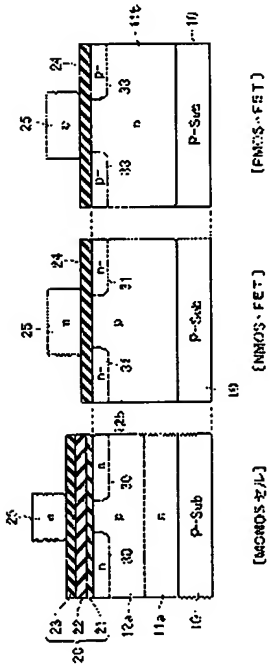
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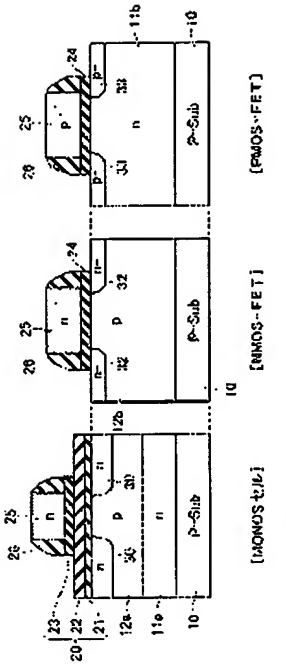
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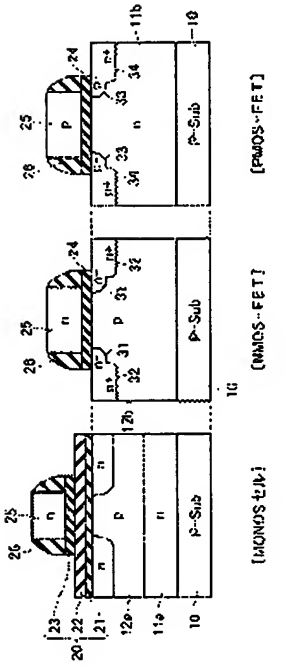
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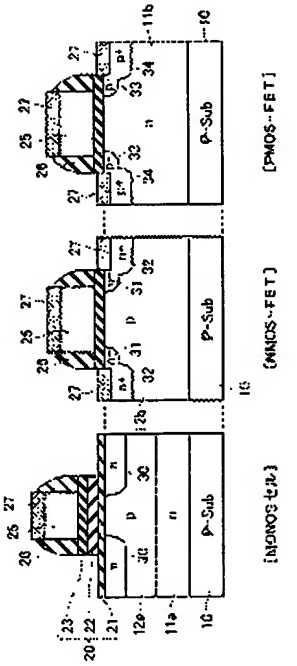
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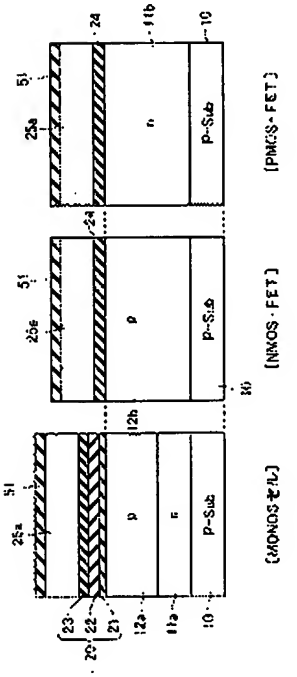
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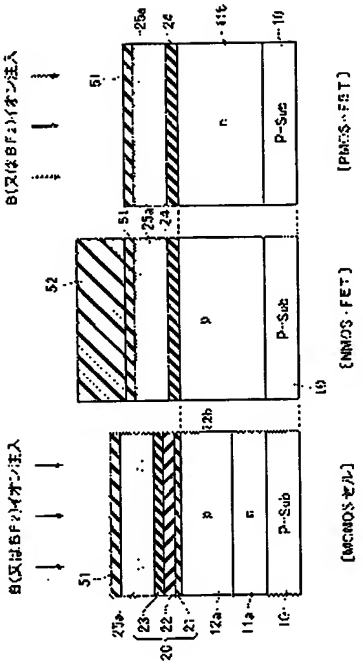

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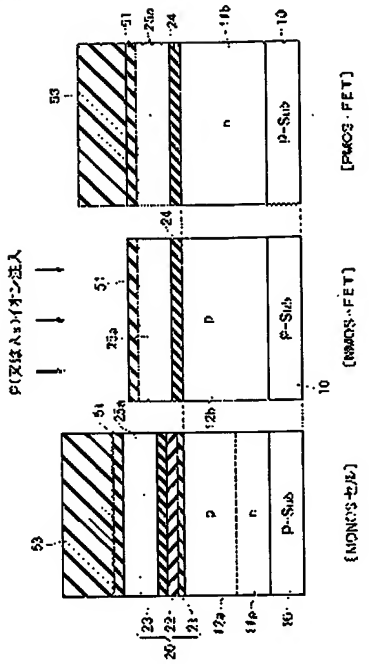

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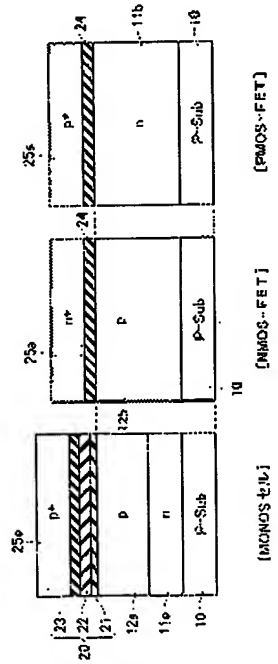

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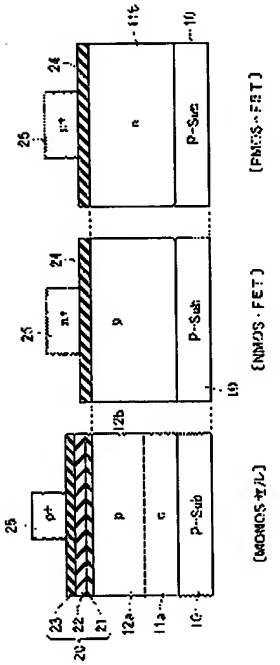

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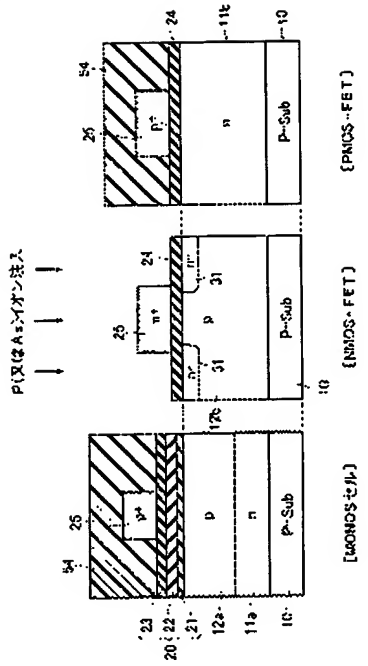

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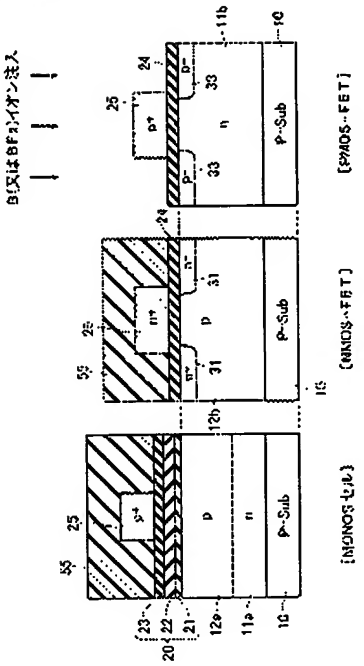

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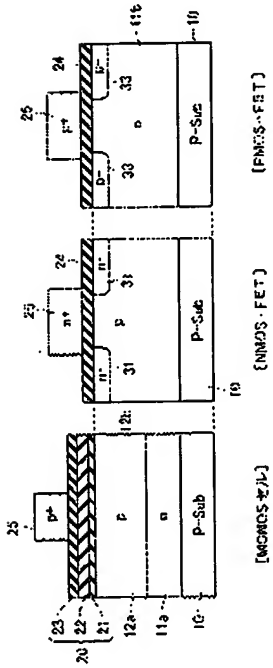

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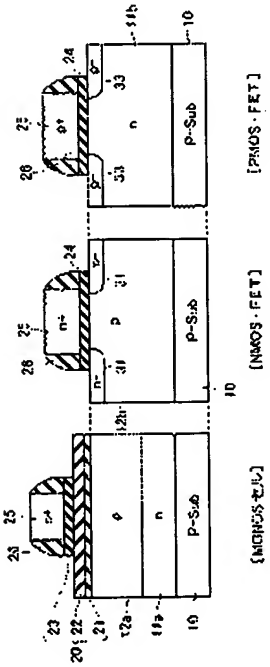

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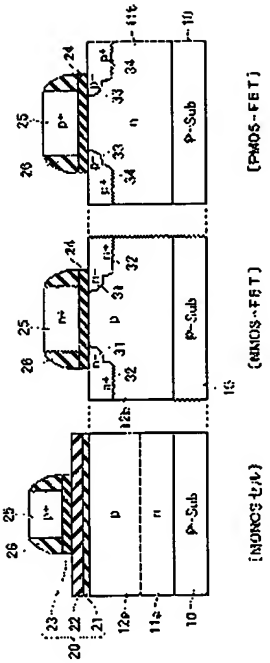

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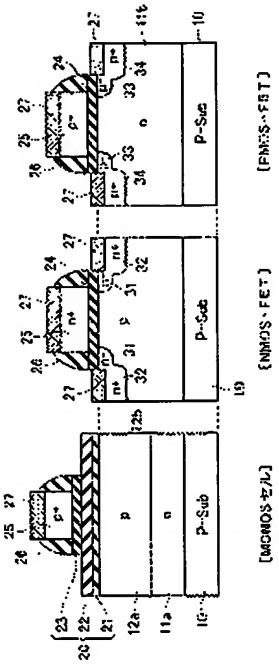

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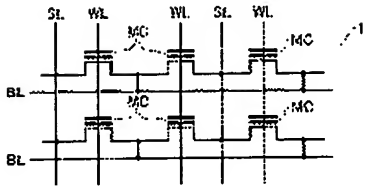

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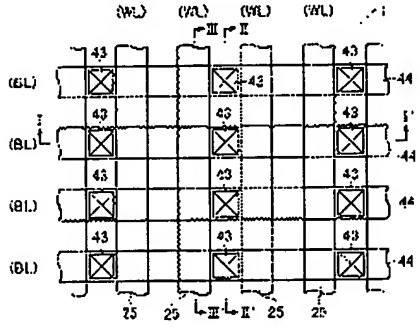

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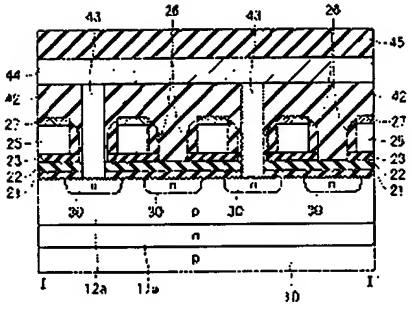

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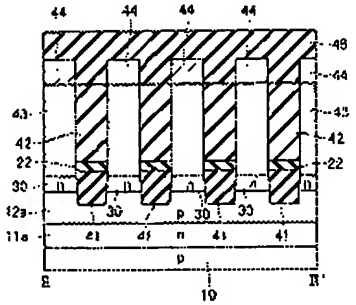

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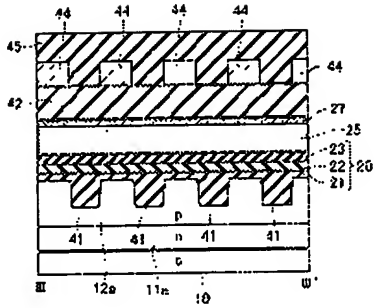

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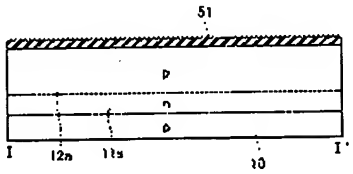

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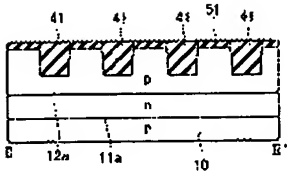

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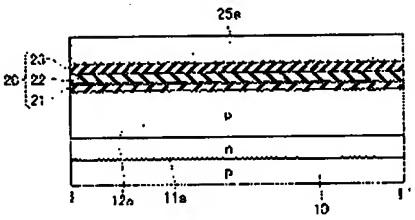

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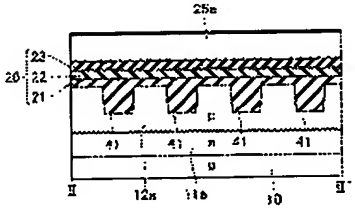

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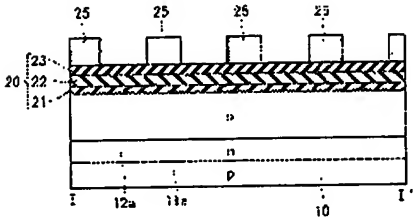

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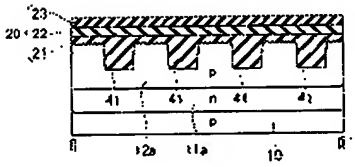

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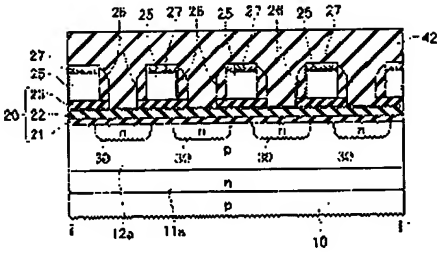

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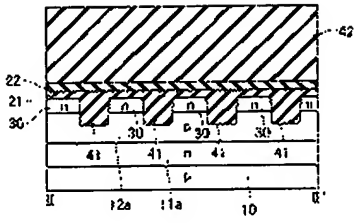

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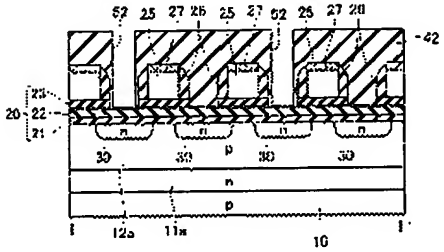

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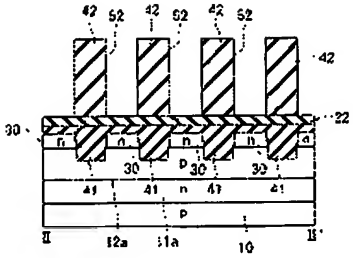

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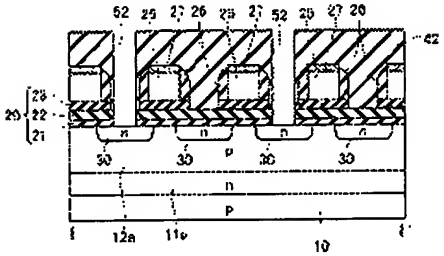

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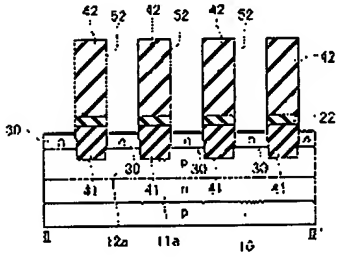

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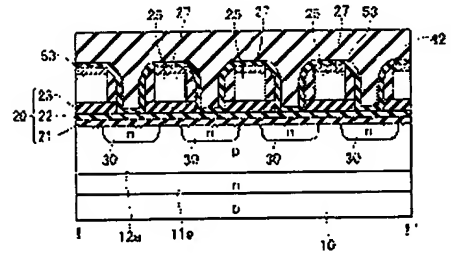

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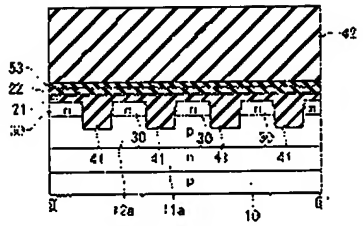

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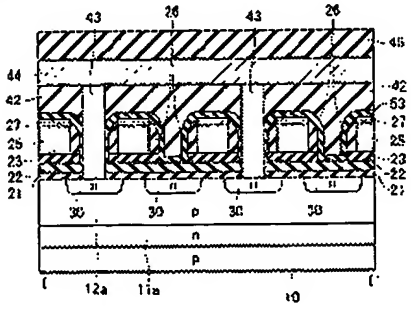

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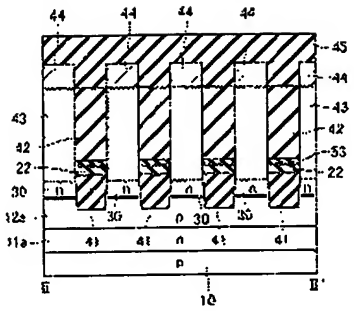
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